

## ABSTRACT:

The invention relates to a method of forming an X-ray layer image of an object (9) to be examined by means of an X-ray device which includes an X-ray source (2) and an X-ray detector (3); the X-ray source (2) and the X-ray detector (3) are displaced in an angular range (14) around the object (9) to be examined in order to acquire X-ray projection images from different directions. When only a single X-ray layer image is to be formed, or a plurality of X-ray layer images of parallel layers (S1, S2) of the object (9) to be examined, in accordance with the invention it is possible to reduce the expenditure required, notably the time required for the acquisition of the X-ray projection images, by forming the X-ray layer image directly from the X-ray projection images, the X-ray layer image being situated in a plane which extends essentially perpendicularly to the bisector (20) of the angular range (14), the angular range (14) amounting to less than  $180^\circ$ . The invention also relates to a corresponding X-ray device, notably a C-arm X-ray device. The angular range (14) can then be chosen at will in the C-arm.

(Fig. 1)